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EXAMINER	
BRUENJES, CHRISTOPHER P	
ART UNIT	**PAPER NUMBER**
1772	15

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Please find below and/or attached an Office communication concerning this application or proceeding.

CLO-15

Office Action Summary	Application No. 09/805,184	Applicant(s) OHSHIMA ET AL.	
	Examiner Christopher P Bruenjes	Art Unit 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) *7-17* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6 and 18-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on August 13, 2003 and September 15, 2003 have been entered.

WITHDRAWN REJECTIONS

2. The claim objection of claim 1 of record in Paper #8, Page 3 Paragraph 7 has been withdrawn due to Applicant's amendment in Paper #10.

REPEATED REJECTIONS

3. The 35 U.S.C. 102 rejections of claims 1-2 and 4-5 as anticipated by Lammers is repeated for the reasons previously of record in Paper #5, Pages 5-6 Paragraph 7 and Paper #8, Page 5 Paragraph 10.

4. The 35 U.S.C. 102 rejections of claims 1-2 and 4-5 as anticipated by Nedstedt is repeated for the reasons previously of record in Paper #5, Page 5 Paragraph 6 and Paper #8, Page 4 Paragraph 9.

5. The 35 U.S.C. 103 rejections of claims 1-6 over Nedstedt in view of Adams et al is repeated for the reasons previously of record in Paper #5, Pages 7-8 Paragraph 8 and Paper #8, Pages 5-7 Paragraph 11.

NEW REJECTIONS

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-6 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 5, 6, 18, and 19, the phrase "type of the sheet roll" renders the claim vague and indefinite because it is not understood what is considered a "type" of sheet roll.

"Type" is determined to include whether a sheet roll is a full sheet roll or an empty sheet roll, because a full roll and an empty roll have different properties in that one is full and one is empty.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless -
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Lammers (USPN 5,984,049).

Lammers anticipates a printable sheet roll cartridge comprising a sheet rolled in a tubular manner to form a hollow portion therein (see abstract). Disposed in the hollow portion is a signal generating arrangement, which is composed on an acoustical bellow device (reference number 5, Figure 2) that is inventively fashioned or arranged within the cavity formed by the roll core (reference number 2, Figure 2). As taught in the specification of the instant application on Pages 22 and 23 "means for providing information as to identify the type of said sheet roll" includes a rectangular flat target, a rectangular flat shape with bent corners, a disc, or a disk-shaped target that forms an annular shape fitting to the inside of the core (reference number 128 of Figure 8 in the instant application). As shown in Figure 2 of Lammers the acoustical bellow device is an disk-shaped target that forms an annular shape fitting to the inside of the core and therefore is structurally a "means for providing information as to identify the type of said sheet roll" as defined in the specification.

8. Claims 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Nedstedt (USPN 4,620,184).

Nedstedt anticipates a printable sheet roll cartridge comprising a sheet rolled in a tubular manner to form a hollow portion therein (see abstract). Nedstedt further teaches that a field-generating element (reference number 11, Figure 1) disposed at a predetermined position, in the case the center position, such that the target blocks an entire diameter of the hollow portion at the predetermined position. When the sheet is rolled in a tubular manner the roll is connected to an axle (reference 4, Figure 1) and a bobbin (reference 5, Figure 1). The space between the axle and bobbin forms a hollow portion. This hollow portion is filled by the field-generating element. The field-generating element is configured to provide information to identify the type of said sheet roll or is a means for providing information as to identify the type of said sheet roll for two distinct reasons. First, as taught in the specification of the instant application on Pages 22 and 23 "means for providing information as to identify the type of said sheet roll" or "target configured to provide information to identify the type of said sheet roll" includes a rectangular flat target, a rectangular flat shape with bent corners, a disc, or a disk-shaped target that forms an annular shape fitting to

the inside of the core (reference number 128 of Figure 8 in the instant application). As shown in Figure 1 of Nedstedt the field-generating element is a disk-shaped target that forms an annular shape fitting to the inside of the core and therefore is structurally a "means for providing information as to identify the type of said sheet roll" or "target configure to provide information to identify the type of said sheet roll" as defined in the specification. Secondly, the field-generating element is used to notify whether the sheet roll is a full roll or an empty roll. Because a full roll has different properties than an empty roll a full roll is a different "type" of sheet roll than an empty roll, and the field-generating element provides the information for identifying the "type" of sheet roll by producing a magnetic field.

9. Claims 1-2, 4-5, and 18 are rejected under 35 U.S.C. 102(e) as being anticipated by Roder (USPN 6,334,587).

Roder anticipates a printable sheet roll cartridge comprising a sheet rolled in a tubular manner to form a sheet roll having a hollow portion therein that includes a tube or core (see abstract). A holder (reference number 7, Figure 2) and cylinder-shaped or disk-shaped code carrier (reference number 12, Figure 2) are disposed within the hollow portion

(col.2, l.10-20). The holder and code carrier combined define the target of the instant invention. The holder and code carrier provide information to identify the type of said sheet roll (see abstract). The holder is formed in a start-shape (col.2, l.14), and therefore has an opening formed therein (reference number 6, Figure 2). The target is located at one of a plurality of predetermined positions, such as first position B or second position C (col.2, l.25-30). The limitation that "the type of the sheet roll is discriminated by determining in which of said predetermined positions said target is located" is an intended use of the target, and therefore receives little patentable weight because articles are defined by structure alone and Roder teaches the structural limitations required by claim 5. The holder and code carrier combined is also a "means for providing information as to identify the type of said sheet roll", for same reasons as discussed above for how the holder and code carrier combined is a target.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roder (USPN 6,334,587) in view of Adams et al (USPN 4,852,823).

Roder teaches all that is claimed in claim 1, but fail to teach that the holder and code carrier combination is colored one of a plurality of predetermined colors. However, Adams et al teach that the type of sheet or yarn roll is determined by coloring a "target" one of a plurality of predetermined colors (col.3, l.20-47). Adams et al specifically teaches that the color of the "target" is an indicium for a particular characteristic of the yarn, such as the type of yarn, or the

source, etc. Therefore, Adams et al teaches that the color of the "target" is used to teach the characteristics or type of the yarn roll, just as Roder teaches that the "target" is used to teach the characteristics or type of the sheet roll.

One of ordinary skill in the art would have recognized that Adams et al is analogous to Roder, because the inventions are similar in structure and function. Both a bobbin for yarn and a core for a sheet roll are structurally similar as tube for wrapping a sheet around it and functionally they are both used to roll and unroll sheets of material. Also, it has been held that in a simple mechanical invention a broad spectrum of prior art must be explored and it is reasonable to permit inquiry into other areas where one of ordinary skill in the art would be aware that similar problems exist. One of ordinary skill in the art would have recognized that bobbins would have the same problem of determining what type of material is wrapped around the bobbin.

One of ordinary skill in the art would have also recognized that the color scheme of Adams et al is another equivalent method of identifying the type of said sheet roll as Roder's code carrier, and that the code carrier of Roder would be colored to give a quick visual indication of the type of sheet

roll, as taught by Adams et al along with the information provided by the reader.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to color the holder and code carrier combination "target" of Roder one of a plurality of predetermined colors, in order to provide the sheet roll with a quick visual indication of the type of sheet roll, as taught by Adams et al.

11. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roder (USPN 6,334,587).

Roder teaches a printable sheet roll cartridge comprising a sheet rolled in a tubular manner to form a hollow portion therein (see abstract). Roder further teaches a holder and code carrier, which combined represents a target configured to provide information to identify the type of said sheet roll (see abstract). The target is disposed at a predetermined position B or C (col.2, l.25-30). Roder fails to explicitly teach that the target blocks an entire diameter of the hollow portion. Roder teaches that the holder is star shaped (col.2, l.14). The definition of star shaped is a graphic design with five or more points. When the holder has six points like an asterisk, the target would block three entire diameters of the hollow portion.

Although Roder only gives an example of a three armed holder, by teaching that the holder is star shaped one of ordinary skill in the art would have recognized that Roder also teaches a holder having six points like an asterisk, which would block three entire diameters of the hollow portion.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made that the star shaped holder taught by Roder includes a holder having six points like an asterisk, which would block three entire diameters of the hollow portion. Furthermore, it has been held that the configuration of a claimed article, such as the target, was a matter of choice, which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed article was significant. See *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roder (USPN 6,334,587).

Roder teaches all that is claimed in claim 1 but fail to explicitly teach that the sheet roll is formed from stencil sheet. However, Roder teaches that the sheet roll is a spare paper roll such as a paper web roll (col.1, l.4-5), but does not

specifically teach that the paper is stencil paper. However, one of ordinary skill in the art would have recognized that any paper web or sheet could be used to form this paper roll around a winding core.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to select stencil as the paper used in forming the paper roll taught by Roder, since it has been held that a one of ordinary skill in the art would select a known material on the basis of its suitability for the intended use of the paper roll, absent the showing of unexpected result. See *In re Leshin*, 125 USPQ 416.

13. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nedstedt alone or in combination with Adams et al.

Nedstedt alone or in combination with Adams et al teach all that is claimed in claim 1 but fail to explicitly teach that the sheet roll is formed from stencil sheet. However, Nedstedt teaches that the sheet roll is a web material roll (see abstract), but does not specifically teach that the web material is stencil. However, one of ordinary skill in the art would

have recognized that any web material or sheet could be used to form this sheet roll around a winding core.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant's invention was made to select stencil as the web material used in forming the paper roll taught by Nedstedt alone or in combination with Adams et al, since it has been held that one of ordinary skill in the art would select a known material on the basis of its suitability for the intended use of the paper roll, absent the showing of unexpected result. See *In re Leshin*, 125 USPQ 416.

ANSWERS TO APPLICANT'S ARGUMENTS

14. Applicant's arguments regarding the claim objection of claim 1 have been considered but are moot since the rejections have been withdrawn.

15. Applicant's arguments regarding the 35 U.S.C. 102 rejections of claims 1, 2, 4, and 5 as anticipated by Nedstedt have been fully considered but they are not persuasive.

In response to Applicant's argument that the field generating element of Nedstedt is not configured to provide in formation to identify the type of the sheet roll, the field-generating element is configured to provide information to

identify the type of said sheet roll or is a means for providing information as to identify the type of said sheet roll for two distinct reasons. First, as taught in the specification of the instant application on Pages 22 and 23 "means for providing information as to identify the type of said sheet roll" or "target configured to provide information to identify the type of said sheet roll" includes a rectangular flat target, a rectangular flat shape with bent corners, a disc, or a disk-shaped target that forms an annular shape fitting to the inside of the core (reference number 128 of Figure 8 in the instant application). As shown in Figure 1 of Nedstedt the field-generating element is a disk-shaped target that forms an annular shape fitting to the inside of the core and therefore is structurally a "means for providing information as to identify the type of said sheet roll" or "target configure to provide information to identify the type of said sheet roll" as defined in the specification. Secondly, the field-generating element is used to notify whether the sheet roll is a full roll or an empty roll. Because a full roll has different properties than an empty roll a full roll is a different "type" of sheet roll than an empty roll, and the field-generating element provides the information for identifying the "type" of sheet roll by producing a magnetic field.

In response to applicant's argument that Nedstedt fails to teach the target is located at one of a plurality of predetermined positions. The roll of Nedstedt inherently has a plurality of predetermined positions by the pure fact that it is a three-dimensional object. The object has to have a center position, end position, an in between position, outside position, inside position, etc. In the case of Nedstedt the predetermined position chosen for the target is the center position. One of ordinary skill in the art would have recognized that a three-dimensional object such as a roll or tube must have predetermined positions and that if the target is in the roll it must be located in one of a plurality of predetermined positions.

16. Applicant's arguments regarding the 35 U.S.C. 102 rejections of claims 1, 2, 4, and 5 as anticipated by Lammers have been fully considered but they are not persuasive.

In response to Applicant's argument that the signal generating means of Lammers is not configured to provide information to identify the type of the roll, as taught in the specification of the instant application on Pages 22 and 23 "a target configured to provide information to identify the type of the roll" includes a rectangular flat target, a rectangular flat

shape with bent corners, a disc, or a disk-shaped target that forms an annular shape fitting to the inside of the core (reference number 128 of Figure 8 in the instant application). As shown in Figure 2 of Lammers the acoustical bellow device is an disk-shaped target that forms an annular shape fitting to the inside of the core and therefore is structurally a "means for providing information as to identify the type of said sheet roll" as defined in the specification.

In response to applicant's argument that Lammers fails to teach the target is located at one of a plurality of predetermined positions. The roll of Lammers inherently has a plurality of predetermined positions by the pure fact that it is a three-dimensional object. The object has to have a center position, end position, an in between position, outside position, inside position, etc. In the case of Lammers the predetermined position chosen for the target is the end position. One of ordinary skill in the art would have recognized that a three-dimensional object such as a roll or tube must have predetermined positions and that if the target is in the roll it must be located in one of a plurality of predetermined positions.

17. Applicant's arguments regarding the 35 U.S.C. 103 rejections of claims 1-6 over Nedstedt in view of Adams of record are not persuasive.

In response to Applicant's argument that there is not suggestion to combine the references, the Examiner recognizes that references cannot be arbitrarily combined and that there must be some reason why one skilled in the art would be motivated to make the proposed combination of primary and secondary references. See In re Nomiya, 184 USPQ 607 (CCPA 1975). However, there is no requirement that a motivation to make the modification be expressly articulated. The test for combining references is what the combination of disclosures taken as a whole would suggest to one of ordinary skill in the art. See In re Laughlin, 170 USPQ 209 (CCPA 1971). References are evaluated by what they suggest to one versed in the art rather than by their specific disclosures. See In re Bozek, 163 USPQ 545 (CCPA 1969). In this case, Adams teaches that inserts or targets are configured and are inserted in rolls in order to provide information to identify the type of roll. Adams specifically teaches identifying the type of roll regarding the color of yarn found on that roll. Furthermore, one of ordinary skill in the art would have recognized that similar identification means are used to distinguish different types of

sheet rolls as different types of yarn rolls, because rolls of yarn and rolls of sheets are structurally similar and both rolls are used as starting materials and are unrolled from said roll in order to make new products. Note "type of roll" defined in its broadest sense defines only that the rolls are different and that there is something to distinguish the difference. For Adams the "type of roll" is referring to color of the yarn on the roll, for Nedstedt "type of roll" is referring to a full roll or empty roll.

In response to applicant's argument that neither Nedstedt nor Adams teaches the target is located at one of a plurality of predetermined positions. The rolls of both Nedstedt and Adams have a plurality of predetermined positions by the pure fact that they are three-dimensional objects. The objects have to have a center position, end position, and in between position, outside position, inside position, etc. In the case of Nedstedt the predetermined position chosen for the target is the center position. In the case of Adams the predetermined position chosen for the target is the end position. One of ordinary skill in the art would have recognized that a three-dimensional object such as a roll or tube must have predetermined positions and that if the target is in the roll it must be located in one of a plurality of predetermined positions.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Koutonen et al (USPN 4,463,251); Minaminaka et al (JP 11-322148) ; Robertsson (WO 94/11846) ; Makinen et al (USPN 5,354,976).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P Bruenjes whose telephone number is 703-305-3440. The examiner can normally be reached on Monday thru Friday from 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 703-308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Christopher P Bruenjes
Examiner
Art Unit 1772

CPB
October 30, 2003

HAROLD PYON
SUPERVISORY PATENT EXAMINER
1772

11/3/03